responsiveness is assessed by determining the point at which SRL reached 400%. Liposome preparations are tested in a range of 50 nM to 100 μM final concentration of total lipid in the aerosol solution.

Arthritis is modeled according to the collagen type-II induced arthritis model of Zeidler et al. (Autoimmunity 21:245, 1995). Briefly, groups of age-matched DBA/1 mice are immunized intradermally with 100 μg collagen type II from bovine cartilage, emulsified in complete Freund's adjuvant, followed 18 days later with 50 μg in incomplete Freund's adjuvant. Test therapeutic compositions are administered weekly from about week 4 to about week 8 following the first collagen injection. The disease is assessed daily by visual signs of erythema, and of swelling of one or more joints. Immunological signs of autoimmunity are monitored by standard immunoassays for serum antibody against collagen type II, collagen type I, and proteoglycans. Reduction in the titers of the autoantibodies, or a delay in the appearance of visual signs of arthritis, are indications of efficacy. Liposomes are tested in a range of about 10–400 μg of carbohydrate equivalent per kg body weight. In the present experiment, liposomes are tested in a range of about 10–400 μg of carbohydrate equivalent per kg body weight per administration, or an equal number of control liposomes.

Other established animal models are implemented in the testing of liposomes for the treatment of additional clinical conditions of interest applying the methods and strategies discussed above.

All publications and patents mentioned in the above specification are herein incorporated by reference. Various modifications and variations of the described method and system of the invention will be apparent to those skilled in the art without departing from the scope and spirit of the invention. Although the invention has been described in connection with specific preferred embodiments, it should be understood that the invention as claimed should not be unduly limited to such specific embodiments. Indeed, various modifications of the described modes for carrying out the invention which are obvious to those skilled in pharmacology, chemistry, biochemistry, and molecular biology or related fields are intended to be within the scope of the following claims.

We claim:

1. A composition for inhibiting the binding between a first cell having a receptor comprising selectin and a second cell having a ligand for said receptor, comprising one or more lipid assemblies, wherein said one or more lipid assembies comprise:

a) lipid monomers wherein substantially all of said lipid monomers are unpolmerized;

b) one or more surface exposed negatively charged oxyacid groups attached to said one or more lipid assemblies and, wherein said oxyacid groups are selected from the group consisting of carboxyl groups and groups of the form $(XO_n)(O^-)_p$, wherein n+p>2 and X is an atom capable of binding three or more oxygen atoms, wherein said one or more surface exposed negatively charged oxyacid groups meets the anionic binding requirement of said receptor; and

c) one or more surface exposed carbohydrates which selectively binds to said receptor.

2. The composition of claim **1**, wherein X is selected from the group consisting of sulphur and phosphorus.

3. The composition of claim **1**, wherein said one or more surface exposed oxyacid groups are covalently attached to said lipid monomers.

4. The composition of claim **1**, wherein said one or more surface exposed carbohydrates comprise neutral carbohydrates.

5. The composition of claim **4**, wherein said neutral carbohydrates are selected from the group consisting of maltose and lactose.

6. The composition of claim **1**, wherein said one or more surface exposed carbohydrates are covalently attached to said lipid monomers.

7. The composition of claim **1**, wherein said selectin is selected from the group consisting of P-selectin, L-selectin, and E-selectin.

8. A method for inhibiting the binding between a first cell having a receptor comprising selectin, and a second cell having a ligand for said receptor, comprising:

a) providing:

i) a sample containing said first cell and said second cell; and

ii) a lipid monomer assembly, wherein substantially all of said lipid monomers are unpolymerized, one or more surface exposed negatively charged oxyacid groups selected from the group consisting of carboxyl groups and groups of the form $(XO_n)(O^-)_p$, wherein n+p>2 and X is an atom capable of binding three or more oxygen atoms, and one or more surface exposed carbohydrates which selectively binds to said receptor; and

b) exposing said lipid assembly to said first cell.

9. The method of claim **8**, wherein said first cell and said second cell are involved in cell—cell interactions selected from the group consisting of cell adhesion and cell migration.

10. The method of claim **8**, wherein X is selected from the group consisting of sulphur and phosphorus.

11. The method of claim **10**, wherein said one or more surface exposed oxyacid groups are covalently attached to said lipid monomers.

12. The method of claim **10**, wherein said one or more surface exposed carbohydrates comprise neutral carbohydrates.

13. The method of claim **12**, wherein said neutral carbohydrates are selected from the group consisting of maltose and lactose.

14. The method of claim **10**, wherein said one or more surface exposed neutral carbohydrates are covalently attached to said lipid monomers.

15. The method of claim **8**, wherein said receptor is selected from the group consisting of P-selectin, L-selectin, and E-selectin.

16. The composition of claim **1**, wherein said first cell and said second cell are involved in cell to cell interactions selected from the group consisting of cell adhesion and cell migration.

17. A composition for inhibiting the binding between a first cell having a receptor comprising selectin and a second cell having a ligand for said receptor, comprising one or more lipid monomers, wherein substantially all of said lipid monomers are unpolymerized, one or more surface exposed carboxyl groups attached to said one or more lipid monomers and which meets the anionic binding requirements of said receptor, and one or more surface exposed carbohydrates which selectively binds to said receptor, wherein said one or more surface exposed carbohydrates is selected from the group consisting of sulfated fucooligosaccharide, sialylated fucooligosaccharide, sialylated fucooligosaccharide analog, maltose, lactose, sulfated lactose, sialic acid, fucose, monosaccharides, disaccharides, trisaccharides, tetrasaccharides, and glycopeptides.